

REMARKS

I. Status of the Claims

Claims 1–18 are pending in the application. Claims 1–9 are cancelled in this amendment. Claim 10 has been amended. Claim 19 has been added to recite a connection designed to operate in accordance with the method of claim 10.

II. Rejections Under § 102

Claims 10, 11, and 15–18 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,462,315 (“Klementich”). Claim 10 has been amended. To the extent that the rejection still applies to the amended claim, it is respectfully traversed.

Claim 10 has been amended to include the limitation that “a torque is applied such that irreversible plastic deformation of a torque shoulder does not occur upon final makeup.” Support for this amendment is found at least in paragraphs 26 and 31 of the specification as originally filed. As amended, claim 10 recites that a *torque* is applied during makeup so as to avoid causing irreversible plastic deformation to the torque shoulder. As described in the specification, by providing a selected clearance between the internal and external stab flanks and by controlling the torque, final makeup can be achieved without causing the typical plastic deformation seen when making up prior art connections.

In Klementich, for example, irreversible plastic deformation occurs when the connection is made up. *See* col. 16–17. “Upon final power tightening (torquing) of the assembled connection, the leading surface of shoulder 520 contacts first undercut surface 548 on box center should configuration 530, while the leading surface of shoulder 540 contacts second undercut surface 528 on pin center shoulder configuration 500, thereby creating two additional zero clearance, metal to metal sealing surfaces.” Col. 22, ll. 45–51. It is apparent that Klementich discloses making up the connection until *irreversible* plastic deformation occurs, in contrast to the presently claimed invention. In the method of the present invention, the clearance and the torque are *selected* to avoid this very phenomenon. The present inventors have

advantageously discovered that by avoiding irreversible plastic deformation, the life of a connection may be increased, without a significant loss in performance.

Furthermore, to the extent that the Examiner believes that Klementich inherently discloses the present invention, the Applicant respectfully notes that the “fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” *In re Rijckaert*, 9 F.3d 1351, 1534, 28 USPQ 2d 1955, 1957 (Fed. Cir. 1993)(reversing inherency based rejection because the Examiner based the rejection on what would result due to optimization of conditions, not what was necessarily present in the prior art).

The MPEP provides, “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ 2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

In the present case, the fact that a clearance may exist between the stab flanks does not *inherently* anticipate the *method* claims of the present invention which involve both (1) selecting a clearance; and (2) using an appropriate torque to prevent irreversible plastic deformation.

Because Klementich fails to show or suggest all of the limitations found in amended claim 10, it fails to anticipate or render obvious amended claim 10. Thus, withdrawal of this rejection is respectfully requested. Claims 11, 15, 16, 17, and 18, which depend from claim 10 are patentable for at least the same reasons.

III. Rejections Under § 103

Claims 1–18 were rejected under 35 U.S.C. § 103(a), as being obvious over U.S. Patent No. 6,174,001 (Thus, withdrawal of this rejection is respectfully requested. Claims 11, 15, 16, 17, and 18, which depend from claim 10 are patentable for at least the same reasons. (“Enderle”) in view of U.S. Patent No. 4,822,081 (“Blose”). Claims 1–9 have been cancelled,

rendering the rejection moot with respect to those claims. Claim 10 has been amended. To the extent that the rejection still applies to the amended claims, the rejection is respectfully traversed.

Enderle discloses a two-step wedge thread, wherein a gap “may exist between the complimentary flanks of one of the thread steps of the box and pin members.” Col. 2, ll. 38-41. However, Enderle fails to show or suggest selecting the torque such that irreversible plastic deformation does not occur, as required by amended claim 10.

Blose, on the other hand, discloses the fully made-up condition occurs when the flanks are touching. Blose specifically states that the “stab and load flanks gradually converge together during make-up and make contact upon final assembly.” Col. 6, ll. 20–21. Thus, Blose does not disclose having a selected clearance between the flanks upon final make-up of the connection. Moreover, Blose also fails to provide what Enderle lacks, namely selecting the torque to avoid irreversible plastic deformation.

The Applicant respectfully notes that prior art references must be considered in their entirety, *i.e.*, as a whole, including portions that would lead away from the claimed invention. *See W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). The fact that a prior art reference “teaches away” from the claimed invention is a *significant* factor to be considered in determining obviousness. *See In re Gurley*, 27 F.3d 551, 554 (Fed. Cir. 1994) (emphasis added).

Further, the Applicant points out that prior art references cannot be combined to render a claimed invention obvious by merely showing that all the limitations of the claimed invention can be found in the prior art references. Instead, there must a suggestion or motivation to combine the references within the prior art references themselves. In other words, regardless of whether prior art references can be combined, there must an indication within the prior art references *expressing desirability* to combine the references. *See In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). Further, the present application *cannot be used a guide* in reconstructing elements of prior art references to render the claimed invention obvious. *See In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

In the present case, Blose explicitly provides that no gap should exist between the external and internal stab flanks, while Enderle discloses that such a gap may exist. There is no reason why a person of ordinary skill in the art would be motivated to combine these references given their explicitly conflicting teachings.

Thus, because both Enderle and Blose fail to show or suggest all of the limitations of the present invention, and because they are not properly combinable, claim 10 as amended is patentable over the prior art. Thus, withdrawal of this rejection is respectfully requested. Claims 11-18, which depend from claim 10 are patentable for at least the same reasons.

CONCLUSION

Applicant believes this reply to be responsive to all outstanding issues and place this application in condition for allowance. If this belief is incorrect, or other issues arise, do not hesitate to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 09432/183002).

Respectfully submitted,

Date: 6/26/01



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